California State Board of Equalization Valuation Division 2002 Capitalization Rate Study Local Exchange Companies

		Ratir	ngs	Capital Str	ucture	Rates of I	Basic	
				Common		Common		Сар
SBE No.	Company Name	Financial	Bond	Equity	Debt	Equity	Debt	Rate
279	Pacific Bell	A+	Aa3	85%	15%	12.30%	7.65%	11.61%
201	Verizon California Inc.	A+	Aa3	85%	15%	12.30%	7.65%	11.61%
270	CTC of The Golden State	Not Rated	Not Rated	75%	25%	13.61%	8.28%	12.28%
284	CTC of California	Not Rated	Not Rated	75%	25%	13.61%	8.28%	12.28%
294	Roseville Telephone Company	Not Rated	Not Rated	75%	25%	13.61%	8.28%	12.28%
	Other Local Exchange Companies	Not Rated	Not Rated	75%	25%	14.92%	9.29%	13.51%

2002 Capitalization Rate Study Local Exchange Companies Industry Summary

- Staff relied on the following models in forecasting equity rates:
 - 1. Discounted Cash Flow (DCF) Consideration was given to the dividend yield + earnings growth weighted average for A+, and A companies only.
 - 2. Capital Asset Pricing Model (CAPM) Consideration was given to both the ex post and ex ante risk premiums.
- Staff recommendations for lien date 2002 are based on the relative risk of the utilities in conjunction with the results of the various financial models. The data considered by staff include the results of DCF analysis (Dividend Yield + Dividend Growth and Dividend Yield + Earnings Growth), the spreads between utility bond yields, and the results of the CAPM analysis. The indicated changes from the above analysis show a downward trend in equity yield rates from the previous year for the large incumbent local exchange carriers such as BellSouth Corp., SBC Communications, and Verizon Communications. Also, the trend is downward for local exchange carriers that are relatively smaller than the incumbent local exchange carriers.
- Pacific Bell is a subsidiary of SBC Communications.
- Verizon California is a subsidiary of Verizon Communications.

2002 Capitalization Rate Study **Local Exchange Companies Flotation Cost Adjustment**

	Equ	ıity		Debt					
Value Line	Recommended	Flotation	Adjusted	Moodys	Recommended	Flotation	Adjusted		
Rating	Rate	Cost in %	Rate	Rating	Rate	Cost in %	Rate		
A+	11.75%	4.50%	12.30%	Aa3	7.52%	1.70%	7.65%		
NR-1	13.00%	4.50%	13.61%	Baa2	8.14%	1.70%	8.28%		
NR-2	14.25%	4.50%	14.92%	Not Rated	9.13%	1.70%	9.29%		

Formula: Cost of Capital Adjusted for Flotation Costs

Where k_u = Cost of capital unadjusted for flotation costs f = Flotation cost as a percentage of the value of securities issued

NR-1: Although no ratings were available for the companies, a Value Line rating of B was applied to the equity and a Moody bond rating of Baa2 was applied to represent the debt for companies with a value between \$50 million - \$300 million.

NR-2: Although no ratings were available for the companies, the Value Line rating of lower than B was applied to the equity and staff estimate was used for the debt for companies with a value less than \$50 Million.

2002 Capitalization Rate Study Local Exchange Companies Return On Common Equity Summary

		A+, A			B++, B+, B	
Description	2002	2001	Change	2002	2001	Change
E/P Ratio - Mean	6.10%	5.61%	0.50%	5.06%	4.63%	0.43%
E/P Ratio - Median	6.27%	5.59%	0.68%	5.06%	4.63%	0.43%
Dividend Yield + Dividend Growth - Mean	5.59%	5.45%	0.13%	8.13%	10.86%	-2.73%
Dividend Yield + Dividend Growth - Median	5.55%	5.41%	0.13%	8.13%	10.86%	-2.73%
Weighted Average (Dividend Yield + Dividend Growth - Mean)	5.76%	5.43%	0.33%	8.25%	12.65%	-4.40%
Dividend Yield + Earnings Growth - Mean	12.77%	14.45%	-1.69%	18.87%	19.12%	-0.25%
Dividend Yield + Earnings Growth - Median	12.52%	14.25%	-1.73%	18.87%	19.12%	-0.25%
Weighted Average (Dividend Yield + Earnings Growth - Mean)	12.45%	13.09%	-0.64%	18.28%	12.53%	5.75%

	A+, A	B++, B+, B	Lower than B
CAPM Analysis - Ex Post:			
2001 Lien Date	12.18%	11.79%	NMD^1
2002 Lien Date	10.09%	11.94%	NMD^1
CAPM Analysis - Ex Ante:			
2001 Lien Date	13.80%	13.32%	NMD^1
2002 Lien Date	10.56%	12.61%	NMD^1
		_	
Discounted Cash Flow	12.45%	NMD^{1}	NMD^{1}
2001 SBE Rate	13.75%		16.00%
2002 Recommended Rate	11.75%	13.00%	14.25%

¹ No Meaningful Data

2002 Capitalization Rate Study **Local Exchange Companies Equity Rates**

a	b	c	d	e	f	g	h	i	j	k	1	m
		Stock	Est.			Est.	Dividend	Est.	Est.	E/P	DivYld+	DivYld+
Value Line	e Company	Price	2002	2001	2001	2002	Yield	Dividends	Earnings	Ratio	DivsGrw	ErngsGrw
Rating	Name	12/31/01	Earnings	Earnings	Dividends	Dividends	(g/c)	Growth	Growth	(d/c)	(h+i)	(h+j)
A	ALLTEL Corp.	61.73	3.10	2.65	1.33	1.37	2.22%	3.50%	11.64%	5.02%	5.72%	13.86%
A+	BellSouth Corp.	38.15	2.40	2.15	0.76	0.80	2.10%	2.00%	10.49%	6.29%	4.10%	12.59%
A+	SBC Communications ¹	39.17	2.45	2.33	1.02	1.04	2.66%	4.50%	9.51%	6.25%	7.16%	12.17%
A+	Verizon Communications ²	47.46	3.25	3.01	1.54	1.60	3.37%	2.00%	9.07%	6.85%	5.37%	12.44%
	Mean Median						2.59% 2.44%	3.00% 2.75%	10.18% 10.00%	6.10% 6.27%	5.59% 5.55%	12.77% 12.52%
	Weighted Average						2.1170	2.7370	10.0070	0.2770	5.76%	12.45%
B++	CenturyTel Inc.	32.80	2.15	1 55	0.20	0.20	0.61%	9.00%	10.92%	6.55%	9.61%	11.53%
В	Telephone & Data Systems	89.75	3.20	1.55 2.75	0.54	0.20 0.58	0.65%		25.55%	3.57%	6.65%	
	Mean						0.63%		18.24%	5.06%	8.13%	
	Median Weighted Average ³						0.63%	7.50%	18.24%	5.06%	8.13% 8.25%	

Source: Columns a, d-g, i, were extracted from the January 4, 2002 Value Line. Source: Column c was extracted from the January 2, 2002 Wall Street Journal.

¹Pacific Bell is a subsidiary of SBC Communications.
²Verizon California is a subsidiary of Verizon Communications.

³Due to the inadequate number of companies sampled, the dividend yield + earnings growth weighted average of 18.28% was not considered in the 2002 recommended equity rate for B++, B+, B companies.

2002 Capitalization Rate Study **Local Exchange Companies Capital Structure**

a	b	c	d	e	f	g	h	i	j	k	1	m
		Common	Common	Market	Long Term	Preferred	Common	Total	L.T.	Preferred	Common	Value
Value Line	Company	Stock	Stock Price	Value	Debt	Stock	Stock	Capital	Debt	Stock	Stock	Line
Rating	Name	Outstanding	12/31/01	Common	(\$Million)	(\$Million)	(\$Million)	(\$Million)	%	%	%	Page
A	ALLTEL Corp.	310,411,834	61.73	19,161.72	3,752.20	0.40	19,161.72	22,914.32	16.37%	0.00%	83.62%	725
A+	BellSouth Corp.	1,876,968,949	38.15	71,606.37	13,105.00	0.00	71,606.37	84,711.37	15.47%	0.00%	84.53%	727
A+	SBC Comm. ¹	3,361,600,000	39.17	131,673.87	18,041.00	0.00	131,673.87	149,714.87	12.05%	0.00%	87.95%	740
A+	Verizon Comm. ²	2,714,453,805	47.46	128,827.98	45,043.00	0.00	128,827.98	173,870.98	25.91%	0.00%	74.09%	745
	Mean Median Weighted Average			87,817.48 100,217.17				431,211.54	17.45% 15.92% 18.54%	0.00%	82.55% 84.08% 81.46%	
B++ B	CenturyTel Inc. Telephone & Data Sys.	141,102,868 58,561,370	32.80 89.75	4,628.17 5,255.88	2,802.0 1,064.3	8.0 9.0	4,628.17 5,255.88	7,438.17 6,329.18	37.67% 16.82%		62.22% 83.04%	
	Mean Median Weighted Average			4,942.03 4,942.03				13,767.36	27.24% 27.24% 28.08%	0.12%	72.63% 72.63% 71.79%	

Source: Column a, c, f, g, were extracted from the January 4, 2002 Value Line. Capital structure as of September 30, 2001.

Source: Column d was extracted from the January 2, 2002 Wall Street Journal.

¹Pacific Bell is a subsidiary of SBC Communications.
²Verizon California is a subsidiary of Verizon Communications.

2002 Capitalization Rate Study Local Exchange Companies **Capital Asset Pricing Model - Ex Ante**

	Value Lir	ne Rating
Component	A+, A	B++, B+, B
Expected Future Return, S&P 500	13.99%	13.99%
Less: Risk Free Return 25 - 30 Year Treasury Bonds ¹	5.69%	5.69%
Risk Premium	8.30%	8.30%
Beta ²	0.59	0.83
Adjusted Risk Premium	4.87%	6.92%
Risk Free Return 25 - 30 Year Treasury Bonds ¹	5.69%	5.69%
Projected Equity Yield	10.56%	12.61%

Wall Street Journal, January 2, 2002.
 The estimated betas are derived from a representative sample of local exchange companies with similar ratings.

2002 Capitalization Rate Study **Local Exchange Companies Capital Asset Pricing Model -Ex Post**

	Value Lii	ne Rating
Component	A+, A	B++, B+, B
Common Stock Return (1926-2001) ¹	12.70%	12.70%
Less: Long Term Government Bonds ¹	5.20%	5.20%
Risk Premium	7.50%	7.50%
Beta ²	0.59	0.83
Adjusted Risk Premium	4.40%	6.25%
Risk Free Return 25 - 30 Year Treasury Bonds ³	5.69%	5.69%
Projected Equity Yield	10.09%	11.94%

Ibbotson Associates Study.
 The estimated betas are derived from a representative sample of local exchange companies with similar ratings.

Wall Street Journal, January 2, 2002.

2002 Capitalization Rate Study Local Exchange Companies Long Term Earnings Growth

a	b	c	d	e	f
Value Line					
Rating	Company Name	Value Line	Zacks	Thomson	Averag
A	ALLTEL Corp.	11.50%	12.90%	10.53%	11.64%
A+	BellSouth Corp.	12.50%	9.25%	9.72%	10.49%
A+	SBC Communications	6.50%	12.15%	9.89%	9.51%
A+	Verizon Communications	9.50%	8.81%	8.91%	9.07%
	Mean	10.00%	10.78%	9.76%	10.18%
	Median	10.50%	10.70%	9.81%	10.00%
	Weighted Average				9.64%
B++	CenturyTel Inc.	10.00%	11.08%	11.69%	10.92%
В	Telephone & Data Systems	31.00%	17.68%	27.98%	25.55%
	Mean	20.50%	14.38%	19.84%	18.24%
	Median	20.50%	14.38%	19.84%	18.24%
	Weighted Average				17.65%

Source:

Columns a, c were extracted from the January 4, 2002 Value Line.

Column d was extracted from Zacks.com.

Column e was extracted from ThomsonFN.com.

2002 Capitalization Rate Study **Local Exchange Companies Beta Analysis**

a	b	c	d	e	f	g	h	i
		Value		Standard		Debt		WTG Avg
Value Line		Line	Zacks	& Poor's	Average	Equity	Unlevered	Debt/Equity
Rating	Company Name	Beta	Beta	Beta	Beta	Ratio	Beta ¹	Ratio
A	ALLTEL Corp.	0.80	0.48	0.48	0.59	0.20	0.52	0.01
A+	BellSouth Corp.	0.75	0.43	0.41	0.53	0.18	0.48	0.04
A+	SBC Communications	0.75	0.54	0.51	0.60	0.14	0.55	0.05
A+	Verizon Communications	NMF	0.66	0.64	0.65	0.35	0.54	0.14
	Mean	0.77	0.53	0.51	0.59	0.22	0.52	0.23
	Median	0.75	0.51	0.50	0.59		0.53	
	Weighted				0.61		0.53	
B++	CenturyTel Inc.	1.00	0.73	0.74	0.82	0.61	0.60	0.33
В	Telephone & Data Systems	0.80	0.94	0.96	0.90	0.20	0.80	0.09
	Mean	0.90	0.84	0.85	0.86	0.41	0.70	
	Median	0.90	0.84	0.85	0.86		0.70	
	Weighted				0.86		0.69	0.42
F 4 . 4 G					A+, A	B++, B+, B		
For A+, A C	•				0.50.2			
	peta based on 15% debt capital st				0.58^{-2}			
Relevered b	peta based on 15% debt capital st	beta	0.59 ²					
For B++,B+,	B Companies:							
Relevered b	eta based on 25% debt capital st	ructure				0.84^{-2}		
Relevered b	eta based on 25% debt capital st	ructure and a w	eighted average	beta		0.83^{-2}		

Formulas:

Where: d/e is the debt to equity ratio t is the tax rate (assumed to be 40%)

Columns a, c were extracted from the January 4, 2002 Value Line. Source:

Column d was extracted from Zacks.com.

Column e was extracted from the Standard and Poor's Stock Reports.

Unlevered beta = beta/[1+(1-t)(d/e)]
Relevered beta = Unlevered beta x [1+(1-t)(d/e)]

California State Board of Equalization Valuation Division 2002 Capitalization Rate Study Interexchange Telephone Companies

		Rati	ings	Capital	Structure	Rates of Return		Basic
SBE No.	Company Name	Common Equity	Bond	Common Equity	Long Term Debt	Common Equity	Long Term Debt	Cap Rate
2310	AT&T Communications	Major Co.	Major Co.	70%	30%	14.66%	8.15%	12.71%
2014	Sprint Communications Co., L.P.	Major Co.	Major Co.	70%	30%	14.66%	8.15%	12.71%
2274	MCI Worldcom Network Services, Inc.	Major Co.	Major Co.	70%	30%	14.66%	8.15%	12.71%
2035	Cable & Wireless USA, Inc.	B++ 1	A2 1	60%	40%	15.71%	8.47%	12.81%
7522	Time Warner Telecom of California, L.P.	B+	B2	60%	40%	15.71%	8.47%	12.81%
7630	Broadwing Communications Services, Inc.	C++	Caa1	60%	40%	17.80%	8.55%	14.10%
7819	Williams Communications LLC	C++	Caa2	60%	40%	17.80%	8.67%	14.15%
2463	QWEST Communications Corporation	C+	Baa2	60%	40%	17.80%	8.28%	13.99%
7761	Level 3 Communications LLC	C+	Caa3	60%	40%	17.80%	8.80%	14.20%
7742	Allegiance Telecom of California, Inc.	C	Caa1	60%	40%	18.32%	8.55%	14.41%
7775	RCN Telecom Services of California Inc.	C	Caa2	60%	40%	18.32%	8.67%	14.46%
	Other Interexchange Carriers	Not Rated	Not Rated	60%	40%	19.37%	9.18%	15.29%
	Other Interexchange Resellers	Not Rated	Not Rated	60%	40%	20.42%	9.94%	16.23%

¹ The equity and debt rates used are based on a "B+" and a "B2" rating respectively. These rates are better suited to the company's California unitary interexchange telephone operations.

2002 Capitalization Rate Study Interexchange Telephone Companies Industry Notes

- Staff relied on the following models in forecasting equity rates:
 - 1. Discounted Cash Flow (DCF) Staff did not consider the DCF model because of the limited number of companies paying dividends.
 - 2. Capital Asset Pricing Model (CAPM) Consideration was given to both the ex post and ex ante risk premiums.

Due to similarities in their operating markets, competitive environments, relative size, and industry risk, staff recommends the same equity and debt rates for AT&T, MCI Worldcom, and Sprint (major companies). Staff used data from Moody's Investors Service and Standard & Poor's to determine the 2002 lien date bond ratings.

For companies whose common equity, preferred stocks and/or bonds are not rated, staff judgment is used in assigning the rates of return because the circumstances or reasons for not rating the bonds or preferred stocks are different for each company.

- The following companies were added to the 2002 Capitalization Rate Study:
 - 1. Time Warner Telecom
 - 2. Williams Communication Group
- The 2002 Capitalization Rate Study does not include interexchange companies that are in bankruptcy status or those with a stock price less than \$1.00.
- The capitalization rates derived are intended to be applied to the companies' unitary interexchange telephone operations.

2002 Capitalization Rate Study Interexchange Telephone Companies Flotation Cost Adjustment

	Equity				Debt		
	Recommended	Flotation	Adjusted		Recommended	Flotation	Adjusted
Value Line Rating	Rate	Cost in %	Rate	Moody's Rating	Rate	Cost in %	Rate
A	13.25%	4.50%	13.87%	A2	7.75%	1.70%	7.88%
Major Company 1	14.00%	4.50%	14.66%	A3	7.88%	1.70%	8.02%
B++	14.00%	4.50%	14.66%	Major Co / Baa1 1	8.01%	1.70%	8.15%
B+	15.00%	4.50%	15.71%	Baa2	8.14%	1.70%	8.28%
C++	17.00%	4.50%	17.80%	Baa3	8.27%	1.70%	8.41%
C+	17.00%	4.50%	17.80%	B2 ²			8.47%
Not Rated	17.50%	4.50%	18.32%	Caa1	8.40%	1.70%	8.55%
Other IEX Carriers	18.50%	4.50%	19.37%	Caa2	8.52%	1.70%	8.67%
Other IEX Resellers	19.50%	4.50%	20.42%	Not Rated	9.02%	1.70%	9.18%
				Not Rated	9.77%	1.70%	9.94%

Staff recommends the same equity rate of return and debt rate for the major companies AT&T, MCI Worldcom, and Sprint.

Formula - Cost of Capital Adjusted for Flotation Costs

Where $k_u =$ The cost of capital unadjusted for floatation costs

f = Flotation cost as a percentage of the value of securities issued

² The debt rate was interpolated from Baa3 and Caa1.

2002 Capitalization Rate Study Interexchange Telephone Companies Summary of Rates of Return

Common Ec	quity	Bonds					
V-L	Rate of	Moody's Bond	Moody's	Rate of			
Rating	Return ¹	Yield	Rating	Return ²			
B++, Major Co.'s	14.00%	Aa=7.4	Aa2	7.40%			
B+	15.00%		Aa3	7.52%			
В	15.00%		A1	7.63%			
C++	17.00%	A=7.75	A2	7.75%			
C+	17.00%		A3	7.88%			
Not Rated	17.50%		Baa1	8.01%			
Other IEX Carriers	18.50%	Baa=8.14	Baa2	8.14%			
Other IEX Resellers	19.50%		Baa3	8.27%			
			Not Rated	3			

The Rate of Return on Common Equity was developed by staff based on the relative risk of the utilities in conjunction with the results of the Capital Asset Pricing Models.

Rates of Return on Bonds were based on Moody's and "Utility Bond Yields" as taken from the December 31, 2001 News Reports. However, because Moody's assigns a yield only to the groups Aaa, Aa, A and Baa for bonds, staff interpolates the difference between these groups in order to achieve a further refinement of the ratings.

For companies whose bonds are not rated, staff judgement is used in assigning the rates of return because the circumstances or reasons for not rating the bonds or preferred stocks are different for each company.

2002 Capitalization Rate Study Interexchange Telephone Companies Summary of Rate of Return on Common Equity

	Valu	Value Line A, B++, B+				
	2002	2001	Change			
E/P Ratio-Mean	4.22%	5.45%	-1.23%			
E/P Ratio-Median	2.70%	5.80%	-3.10%			
Div Yld + Div Growth-Mean	-5.29%	-5.37%	0.08%			
Div Yld + Div Growth-Median	2.49%	0.00%	2.49%			
Weighted Average - Mean	-9.59%	-12.12%	2.53%			
Div Yld + Earn.Growth-Mean	10.30%	12.96%	-2.66%			
Div Yld + Earn.Growth-Median	10.64%	12.51%	-1.87%			
Weighted Average - Mean	11.77%	10.55%	1.22%			

	Value Line Ratings							
		Major Co,			Other IEX	Other IEX		
<u> </u>	A	B++	B+, B	C++,C+,NR	Carriers	Resellers		
2001	14.00%	14.50%	15.50%	18.00%	19.00%	20.00%		
CAPM - Ex Ante	13.25%	13.99%	15.65%	17.31%	NMF	NMF		
CAPM - Ex Post	12.52%	13.19%	14.69%	16.19%	NMF	NMF		
2002 Valuation Division Recommendation	13.25%	14.00%	15.00%	17.00%	18.50%	19.50%		

NMF: No meaningful figure

For 2001, Value Line Ratings A and B++ included the three major companies: AT&T Communications, Inc., WorldCom, Inc., Sprint Communications Co. L.P (Major Companies). For 2002, due to similarities in their operating markets, competitive environments, relative size, and industry risk, staff recommends the same equity rate for the Major Companies.

2002 Capitalization Rate Study Interexchange Telephone Companies Equity Rates

a	b	c	d	e	f	g	h	i	j	k	1	m
Financial		Stock	Estimated			Dividend	Dividend	Estimated	Estimated	E/P	DvYld+	DvYld+
Strength		Price	2002	2001	2001	Est. 2002	Yield	Dividend	Earnings	Ratio	DvGrth	ErngsGr
Value Line	Company Name	12/31/01	EPS	EPS	Dividends	Amount	(g/c)	Growth	Growth	(d/c)	(h+i)	(h+j)
A	AT&T Corp.	14.0800	0.35	-0.95	0.15	0.15	1.07%	-24.50%	9.58%	2.49%	-23.43%	10.64%
B++	Cable & Wireless PLC	14.8100	0.40	0.20	0.80	0.75	5.06%	0.00%	0.50%	2.70%	5.06%	5.56%
B++	WorldCom, Inc.	12.7000	0.95	0.75	0.00	0.00	0.00%	NMF	14.41%	7.48%	NMF	14.41%
$\mathrm{B}+$	Sprint Comm. Co., L.P.	20.0800	1.40	1.22	0.50	0.50	2.49%	0.00%	6.15%	6.97%	2.49%	8.64%
C++	Williams Comm Group	2.3500	-2.24	-0.61	0.00	0.00	0.00%	0.00%	36.80%	-95.32%	0.00%	36.80%
C++	Broadwing Inc.	9.5000	-0.40	-0.65	0.00	0.00	0.00%	NMF	17.78%	-4.21%	NMF	17.78%
C+	RCN Corporation	2.9300	-6.90	-9.00	0.00	0.00	0.00%	0.00%	15.00%	-235.49%	0.00%	15.00%
							4.000/	4.0007	0.4.607	17.000	2.100/	
	Mean						1.23%	-4.90%	8.16%	-45.06%	-3.18%	15.55%
	Median						0.00%	0.00%	14.41%	2.49%	0.00%	14.41%
	Weighted Average										-9.59%	13.67%

Because of the limited number of interexchange companies with preferred stock or paying dividends the Discount Cash Flow model is not considered in the derivation of the 2002 capitalization rate.

Source: Columns a,b,d-m were extracted from the January 5, 2002 Value Line.

Source: Column c was extracted from Yahoo Finance December 31, 2001 closing stock prices.

2002 Capitalization Rate Study **Interexchange Telephone Companies Capital Asset Pricing Model - Ex Ante**

	Va	lue Line Rating			
Component	Major Companies 1	B++ ²	B+, B ²	C++, C+ ²	B++, B+, C++, C+, C
	(a)	(b)	(c)	(d)	(b+c+d)
Expected Future Return - S & P 500	13.99%	13.99%	13.99%	13.99%	13.99%
Less: Risk Free Return 25 - 30 Year Treasury Bonds ³	5.69%	5.69%	5.69%	5.69%	5.69%
Risk Premium	8.30%	8.30%	8.30%	8.30%	8.30%
Relevered Average Beta	0.91	1.00	1.20	1.40	1.32
Adjusted Risk Premium	7.56%	8.30%	9.96%	11.62%	10.93%
Risk Free Return 25 - 30 Year Treasury Bonds ³	5.69%	5.69%	5.69%	5.69%	5.69%
Projected Return on Common Equity	13.25%	13.99%	15.65%	17.31%	16.62%

These columns represent the Projected Return as calculated for the Major Companies and Non-major companies from the Beta Analysis page.

The estimated betas for B++, B+, B, C++, and C+ rated companies are based on interexchange data analysis.

Wall Street Journal dated January 2, 2002.

2002 Capitalization Rate Study **Interexchange Telephone Companies Capital Asset Pricing Model - Ex Post**

	Va	lue Line Rating			
Component	Major Companies 1	B++ ²	B+, B ²	C++, C+ ²	B++, B+, C++, C+, C
	(a)	(b)	(c)	(d)	(b+c+d)
Total Return, Large Company Stocks ³	12.70%	12.70%	12.70%	12.70%	12.70%
Less: Long Term Government Bonds ³	5.20%	5.20%	5.20%	5.20%	5.20%
Risk Premium	7.50%	7.50%	7.50%	7.50%	7.50%
Relevered Average Beta	0.91	1.00	1.20	1.40	1.32
Adjusted Risk Premium	6.83%	7.50%	9.00%	10.50%	9.88%
Risk Free Return 25 - 30 Year Treasury Bonds ⁴	5.69%	5.69%	5.69%	5.69%	5.69%
Projected Return on Common Equity	12.52%	13.19%	14.69%	16.19%	15.57%

These columns represent the Projected Return as calculated for the Major Companies and Non-major companies from the Beta Analysis page.

The estimated betas for B++, B+, B, C++, and C+ rated companies are based on interexchange data analysis.

Ibbotson Associates Study

Wall Street Journal dated January 2, 2002.

2002 Capitalization Rate Study Interexchange Telephone Companies Beta Analysis

a	b	С	d	e	f	g	h	i
		Value		Standard		Debt		Wtg Avg
Value Line	:	Line's	Zack's	& Poor's	Average	Equity	Unlevered	Debt/Equit
Rating	Company Name	Beta	Beta	Beta	Beta	Ratio	Beta ¹	Ratio
A	AT&T Corp.	nmf	0.98	0.94	0.96	0.54	0.70	0.28
B++	WorldCom, Inc.	1.00	1.48	1.40	1.29	0.86	0.81	0.31
B+	Sprint Comm. Co., L.P.	0.80	0.63	0.59	0.67	0.19	0.60	0.02
	Mean	0.90	1.03	0.98	0.98	0.53	0.70	
	Median	0.90	0.98	0.94	0.96		0.70	
	Weighted				1.05		0.73	0.61
B++	Cable & Wireless PLC	1.25	1.39	1.37	1.34	0.08	1.27	0.03
B+	Time Warner Telecom	2.25	NA	NA	2.25	0.53	1.71	0.01
C++	Williams Comm Grp	1.20	NA	0.59	0.90	4.77	0.23	0.27
C++	Broadwing Inc.	1.25	1.75	1.69	1.56	1.34	0.87	0.05
C+	QWEST Comm. Intl.	1.40	1.52	1.07	1.33	0.87	0.87	0.32
C+	Level 3 Comm., Inc.	1.80	2.47	NA	2.14	4.13	0.61	0.34
C+	RCN Corporation	1.80	2.18	NA	1.99	16.03	0.19	0.65
C	Allegiance Telecom, Inc.	1.95	3.77	NA	2.86	1.03	1.77	0.02
	Mean	1.61	2.18	1.18	1.80	3.60	0.94	
	Median	1.60	1.97	1.22	1.78		0.87	
	Weighted				1.46		0.97	1.70

Major Relevered Beta based on 30% Debt Capital Structure Non-major Relevered Beta based on 40% Debt Capital Structure 0.91^{2} 1.32^{2}

Formulas:

Where: D/E is the debt to equity ratio

t is the tax rate (assumed to be 40%)

Source: Columns a,b,c were extracted from the Value Line.

Source: Column d was extracted from Zack's.

Source: Column e was extracted from Standard and Poor's Stock Reports.

¹ Unlevered Beta = Beta/[1+(1-t)(D/E)]

² Relevered Beta = Unlevered Beta X [1+(1-t)(D/E)]

2002 Capitalization Rate Study Interexchange Telephone Companies Capital Structure

Bond Rating		Common		$(d \times e)$								
Rating		Common	$(d \times e)$									
_		Common	Stock	Mkt Value	Pfd	L.T.	Total	Common	Pfd	L.T.		
		Stock	Price	Equity	Stock	Debt	Capital	Equity	Stock	Debt		
Moody	Company Name	Outstanding	31-Dec-01	(\$Millions)	(\$Millions)	(\$Millions)	(\$Millions)	%	%	%		
A3	AT&T Corp.	3,538,030,557	18.14	64,179.9	4,718.0	30,007.0	98,904.9	64.891%	4.770%	30.339%		
A3	WorldCom, Inc.		12.70	37,584.4	1975.0	30,161.0	69,720.4	53.907%	2.833%	43.260%		
Baa1	· ·		20.08	19,570.5	10.0	3,624.0		84.339%	0.043%	15.618%		
	Mean							67.712%	2.549%	29.739%		
	Median							64.891%	2.833%	30.339%		
	Weighted Average							63.251%	3.494%	33.254%		
A2	Cable & Wireless PLC	2,735,000,000	14.81	40,505.4	0.0	3,399.0	43,904.4	92.258%	0.000%	7.742%		
B2	Time Warner Telecom	114,373,009	17.69	2,023.3	0.0	1,064.8	3,088.1	65.519%	0.000%	34.481%		
Caa1	Williams Comm Grp	490,700,000	2.35	1,153.1	250.0	5,245.4	6,648.5	17.344%	3.760%	78.896%		
NR	Broadwing Inc.	218,715,680	9.50	2,077.8	129.4	2,655.6	4,862.8	42.728%	2.661%	54.611%		
Baa1	QWEST Comm. Intl.	1,664,945,725	14.13	23,525.7	0.0	20,436.0	43,961.7	53.514%	0.000%	46.486%		
Caa1	Level 3 Comm., Inc.	382,934,153	5.00	1,914.7	0.0	7,910.0	9,824.7	19.489%	0.000%	80.511%		
Caa2	RCN Corporation	97,338,000	2.93	285.2	2103.4	2,469.5	4,858.1	5.871%	43.297%	50.833%		
A2	Allegiance Telecom, Inc	115,244,413	8.29	955.4	0.0	983.2	1,938.6	49.283%	0.000%	50.717%		
	Mean							43.251%	6.215%	50.535%		
	Median							46.006%	0.000%	50.775%		
	Weighted Average							60.830%	2.085%	37.085%		
	A3 A3 Baa1 A2 B2 Caa1 NR Baa1 Caa1 Caa2	A3 AT&T Corp. A3 WorldCom, Inc. Baa1 Sprint Comm. Co., L.P. Mean Median Weighted Average A2 Cable & Wireless PLC B2 Time Warner Telecom Caa1 Williams Comm Grp NR Broadwing Inc. Baa1 QWEST Comm. Intl. Caa1 Level 3 Comm., Inc. Caa2 RCN Corporation A2 Allegiance Telecom, Inc Mean Median Weighted Average	A3 AT&T Corp. 3,538,030,557 A3 WorldCom, Inc. 2,959,402,201 Baa1 Sprint Comm. Co., L.P. 974,628,315 Mean Median Weighted Average A2 Cable & Wireless PLC 2,735,000,000 B2 Time Warner Telecom 114,373,009 Caa1 Williams Comm Grp 490,700,000 NR Broadwing Inc. 218,715,680 Baa1 QWEST Comm. Intl. 1,664,945,725 Caa1 Level 3 Comm., Inc. 382,934,153 Caa2 RCN Corporation 97,338,000 A2 Allegiance Telecom, Inc 115,244,413 Mean Median Weighted Average	A3 AT&T Corp. 3,538,030,557 18.14 A3 WorldCom, Inc. 2,959,402,201 12.70 Baa1 Sprint Comm. Co., L.P. 974,628,315 20.08 Mean Median Weighted Average A2 Cable & Wireless PLC 2,735,000,000 14.81 B2 Time Warner Telecom 114,373,009 17.69 Caa1 Williams Comm Grp 490,700,000 2.35 NR Broadwing Inc. 218,715,680 9.50 Baa1 QWEST Comm. Intl. 1,664,945,725 14.13 Caa1 Level 3 Comm., Inc. 382,934,153 5.00 Caa2 RCN Corporation 97,338,000 2.93 A2 Allegiance Telecom, Inc 115,244,413 8.29 Mean Median Weighted Average	A3 AT&T Corp. 3,538,030,557 18.14 64,179.9 A3 WorldCom, Inc. 2,959,402,201 12.70 37,584.4 Baa1 Sprint Comm. Co., L.P. 974,628,315 20.08 19,570.5 Mean Median Weighted Average A2 Cable & Wireless PLC 2,735,000,000 14.81 40,505.4 B2 Time Warner Telecom 114,373,009 17.69 2,023.3 Caa1 Williams Comm Grp 490,700,000 2.35 1,153.1 NR Broadwing Inc. 218,715,680 9.50 2,077.8 Baa1 QWEST Comm. Intl. 1,664,945,725 14.13 23,525.7 Caa1 Level 3 Comm., Inc. 382,934,153 5.00 1,914.7 Caa2 RCN Corporation 97,338,000 2.93 285.2 A2 Allegiance Telecom, Inc 115,244,413 8.29 955.4 Mean Median Weighted Average	A3 AT&T Corp. 3,538,030,557 18.14 64,179.9 4,718.0 A3 WorldCom, Inc. 2,959,402,201 12.70 37,584.4 1975.0 Baa1 Sprint Comm. Co., L.P. 974,628,315 20.08 19,570.5 10.0 Mean Median Weighted Average A2 Cable & Wireless PLC 2,735,000,000 14.81 40,505.4 0.0 B2 Time Warner Telecom 114,373,009 17.69 2,023.3 0.0 Caa1 Williams Comm Grp 490,700,000 2.35 1,153.1 250.0 NR Broadwing Inc. 218,715,680 9.50 2,077.8 129.4 Baa1 QWEST Comm. Intl. 1,664,945,725 14.13 23,525.7 0.0 Caa1 Level 3 Comm., Inc. 382,934,153 5.00 1,914.7 0.0 Caa2 RCN Corporation 97,338,000 2.93 285.2 2103.4 A2 Allegiance Telecom, Inc 115,244,413 8.29 955.4 0.0 Mean Median Weighted Average	A3 AT&T Corp. 3,538,030,557 18.14 64,179.9 4,718.0 30,007.0 A3 WorldCom, Inc. 2,959,402,201 12.70 37,584.4 1975.0 30,161.0 Baa1 Sprint Comm. Co., L.P. 974,628,315 20.08 19,570.5 10.0 3,624.0 Mean Median Weighted Average A2 Cable & Wireless PLC 2,735,000,000 14.81 40,505.4 0.0 3,399.0 B2 Time Warner Telecom 114,373,009 17.69 2,023.3 0.0 1,064.8 Caa1 Williams Comm Grp 490,700,000 2.35 1,153.1 250.0 5,245.4 NR Broadwing Inc. 218,715,680 9.50 2,077.8 129.4 2,655.6 Baa1 QWEST Comm. Intl. 1,664,945,725 14.13 23,525.7 0.0 20,436.0 Caa1 Level 3 Comm., Inc. 382,934,153 5.00 1,914.7 0.0 7,910.0 Caa2 RCN Corporation 97,338,000 2.93 285.2 2103.4 2,469.5 A2 Allegiance Telecom, Inc 115,244,413 8.29 955.4 0.0 983.2 Mean Median Weighted Average	A3 AT&T Corp. 3,538,030,557 18.14 64,179.9 4,718.0 30,007.0 98,904.9 A3 WorldCom, Inc. 2,959,402,201 12.70 37,584.4 1975.0 30,161.0 69,720.4 Baa1 Sprint Comm. Co., L.P. 974,628,315 20.08 19,570.5 10.0 3,624.0 23,204.5 Mean Median Weighted Average A2 Cable & Wireless PLC 2,735,000,000 14.81 40,505.4 0.0 3,399.0 43,904.4 B2 Time Warner Telecom 114,373,009 17.69 2,023.3 0.0 1,064.8 3,088.1 Caa1 Williams Comm Grp 490,700,000 2.35 1,153.1 250.0 5,245.4 6,648.5 NR Broadwing Inc. 218,715,680 9.50 2,077.8 129.4 2,655.6 4,862.8 Baa1 QWEST Comm. Intl. 1,664,945,725 14.13 23,525.7 0.0 20,436.0 43,961.7 Caa1 Level 3 Comm., Inc. 382,934,153 5.00 1,914.7 0.0 7,910.0 9,824.7 Caa2 RCN Corporation 97,338,000 2.93 285.2 2103.4 2,469.5 4,858.1 A2 Allegiance Telecom, Inc 115,244,413 8.29 955.4 0.0 983.2 1,938.6 Mean Median Weighted Average	A3 AT&T Corp. 3,538,030,557 18.14 64,179.9 4,718.0 30,007.0 98,904.9 64.891% A3 WorldCom, Inc. 2,959,402,201 12.70 37,584.4 1975.0 30,161.0 69,720.4 53.907% Baa1 Sprint Comm. Co., L.P. 974,628,315 20.08 19,570.5 10.0 3,624.0 23,204.5 84.339% Mean Median Weighted Average 63.251% 64.891% 63.251% B2 Time Warner Telecom 114,373,009 17.69 2,023.3 0.0 1,064.8 3,088.1 65.519% Caa1 Williams Comm Grp 490,700,000 2.35 1,153.1 250.0 5,245.4 6,648.5 17.344% NR Broadwing Inc. 218,715,680 9.50 2,077.8 129.4 2,655.6 4,862.8 42.728% Baa1 QWEST Comm. Intl. 1,664,945,725 14.13 23,525.7 0.0 20,436.0 43,961.7 53.514% Caa1 Level 3 Comm., Inc. 382,934,153 5.00 1,914.7 0.0 7,910.0 9,824.7 19.489% Caa2 RCN Corporation 97,338,000 2.93 285.2 2103.4 2,469.5 4,858.1 5.871% A2 Allegiance Telecom, Inc 115,244,413 8.29 955.4 0.0 983.2 1,938.6 49.283% Mean Median	A3 AT&T Corp. 3,538,030,557 18.14 64,179.9 4,718.0 30,007.0 98,904.9 64.891% 4.770% A3 WorldCom, Inc. 2,959,402,201 12.70 37,584.4 1975.0 30,161.0 69,720.4 53,907% 2.833% Baa1 Sprint Comm. Co., L.P. 974,628,315 20.08 19,570.5 10.0 3,624.0 23,204.5 84,339% 0.043% Median Median Weighted Average 67.712% 2.549% 64.891% 2.833% B2.833% B2.834 Median Weighted Average 7.735,000,000 14.81 40,505.4 0.0 3,399.0 43,904.4 92.258% 0.000% B2 Time Warner Telecom 114,373,009 17.69 2,023.3 0.0 1,064.8 3,088.1 65.519% 0.000% Caa1 Williams Comm Grp 490,700,000 2.35 1,153.1 250.0 5,245.4 6,648.5 17.344% 3.760% NR Broadwing Inc. 218,715,680 9.50 2,077.8 129.4 2,655.6 4,862.8 42.728% 2.661% Caa1 Level 3 Comm. Intl. 1,664,945,725 14.13 23,525.7 0.0 20,436.0 43,961.7 53.514% 0.000% Caa2 RCN Corporation 97,338,000 2.93 285.2 2103.4 2,469.5 4,858.1 5.871% 43.297% A2 Allegiance Telecom, Inc 115,244,413 8.29 955.4 0.0 983.2 1,938.6 49.283% 0.000% Mean Median Median Weighted Average 60.830% 2.085%		

N/R: No rating

Source: Columns a, d, g - 1 were extracted from the January 5, 2002 Value Line; columns b and c were extracted from the Dec. 2001 Mergent Bond Record. Column e was extracted from the December 31, 2001 Yahoo Finance closing stock prices.

California State Board of Equalization Valuation Division 2002 Capitalization Rate Study Wireless Companies

			Capital	Structure	Rates of F	Return	Basic
			Common		Common		Cap
SBE No.	Company Name	Rating	Equity	Debt	Equity	Debt	Rate
2502	Bay Area Cellular Telephone Comp.	NR-1	80%	20%	14.50%	8.24%	13.25%
2512	Verizon Wireless - San Diego	NR-1	80%	20%	14.50%	8.24%	13.25%
2513	Sacramento Valley Limited Partnership	NR-1	80%	20%	14.50%	8.24%	13.25%
2532	Los Angeles SMSA, Ltd.	NR-1	80%	20%	14.50%	8.24%	13.25%
2547	AB Cellular Holding, LLC	NR-1	80%	20%	14.50%	8.24%	13.25%
2559	GTE Mobilnet of California, Ltd. Pts.	NR-1	80%	20%	14.50%	8.24%	13.25%
2606	AT&T Wireless Services of CA, Inc.	NR-1	80%	20%	14.50%	8.24%	13.25%
2720	Cox Communications PCS, L.P.	NR-2	75%	25%	15.25%	8.39%	13.54%
2722	Sprint Spectrum L.P.	NR-2	75%	25%	15.25%	8.39%	13.54%
2724	Pacific Telesis Mobile Services, LLC	NR-2	75%	25%	15.25%	8.39%	13.54%
2748	Pacific Bell Wireless LLC	NR-2	75%	25%	15.25%	8.39%	13.54%
2749	AT&T Wireless PCS, LLC	NR-2	75%	25%	15.25%	8.39%	13.54%
2755	Cingular-Southwestern Bell Mobile Svcs.	NR-2	75%	25%	15.25%	8.39%	13.54%
2737	Nextel of California, Inc.	NR-3	70%	30%	15.71%	8.65%	13.59%
2552	Fresno MSA Limited Partnership	NR-3	70%	30%	15.71%	8.65%	13.59%
2611	Cagal Cellular Communications Corp.	NR-3	70%	30%	15.71%	8.65%	13.59%
2622	Bakersfield Cellular Telephone Comp.	NR-3	70%	30%	15.71%	8.65%	13.59%
2626	Santa Barbara Cellular Systems, Ltd.	NR-3	70%	30%	15.71%	8.65%	13.59%
2627	GTE Mobilnet of Santa Barbara, L.P.	NR-3	70%	30%	15.71%	8.65%	13.59%
2628	Napa Cellular Telephone Comp.	NR-3	70%	30%	15.71%	8.65%	13.59%
2630	Santa Cruz Cellular Telephone Comp.	NR-3	70%	30%	15.71%	8.65%	13.59%
2637	Salinas Cellular Telephone Comp.	NR-3	70%	30%	15.71%	8.65%	13.59%
2641	Visalia Cellular Telephone Comp.	NR-3	70%	30%	15.71%	8.65%	13.59%
	Other Wireless Companies	NR-4	65%	35%	19.00%	8.90%	15.47%
	Wireless Reseller Companies	NR-5	65%	35%	22.00%	9.92%	17.77%

NR-1: Companies representing large size wireless markets in California.

NR-2: Companies representing predominantly large to midsize PCS markets in CA.

NR-3: Companies representing predominantly midsize wireless markets in California.

NR-4: Other wireless carriers (including Radio Telephones)

NR-5: All wireless reseller companies.

2002 Capitalization Rate Study Industry Notes Wireless Companies

- Staff relied on the following models in forecasting equity rates:
 - 1. Capital Asset Pricing Model consideration was given to both the ex post and ex ante risk premium.
 - 2. Consideration was given to size premiums in assigning equity rates to the smaller wireless companies.
 - 3. The Discount Cash Flow model was not relied upon because a majority of the companies in the study are not currently paying dividends. In addition, the reported earnings growth rates may not be sustainable.
- The following companies were omitted from the 2002 Capitalization Rate Study because Value Line reported no meaningful data for them:
 - 1. Powertel (acquired by VoiceStream)
 - 2. Centennial Communications Corp. (eliminated from the sample due to a lack of sufficient financial information).
- The basic capitalization rates were assigned to companies based on the size and ranking of their operating markets in California. A classification was added in order to reflect the cost of capital of large to midsize PCS companies.

2002 Capitalization Rate Study Wireless Companies Flotation Cost Adjustment

-	Eq	uity			Bond				
Value Line	Recommended	Flotation	Adjusted	Moody's	Recommended	Flotation	Adjusted		
Rating	Rate	Cost in %	Rate	Rating	Rate ²	Cost in %	Rate		
NR-1	Note ¹		14.50%	Not Rated	8.10%	1.70%	8.24%		
NR-2	Note ¹		15.25%	Not Rated	8.25%	1.70%	8.39%		
NR-3	15.00%	4.50%	15.71%	Not Rated	8.50%	1.70%	8.65%		
NR-4	Note ¹		19.00%	Not Rated	8.75%	1.70%	8.90%		
NR-5	Note ¹		22.00%	Not Rated	9.75%	1.70%	9.92%		

Staff relied upon the Ex Post and Ex Ante Capital Asset Pricing Model (CAPM) estimating the recommended equity rates for NR-3 categories. Equity rates for the other non-rated categories (NR-1, NR-2, NR-4, NR-5) were extrapolated based on analyzing the relative risks of operating a wireless system within these categories.

Formula - Cost of Capital Adjusted for Flotation Costs

Where k_u = The cost of capital unadjusted for floatation costs

f = Flotation cost as a percentage of the value of securities issued

² Staff reviewed bonds issued by a major company with a presence in the major markets which revealed a bond rating of Baa ¹. Based on this, staff concludes that a reasonable debt rate is 8.10%, with an increase in the rates for the smaller market categories.

2002 Capitalization Rate Study Wireless Companies

Capital Asset Pricing Model - Ex Ante

	Industry Computation
Component	
Expected Future Return, S&P 500	13.99%
Less: Risk Free Return 25 - 30 Year Treasury Bonds ¹	5.69%
Ex-Ante Risk Premium	8.30%
Beta ²	1.20_
Adjusted Risk Premium	9.96%
Risk Free Return 25 - 30 Year Treasury Bonds ¹	5.69%
Projected Return on Common Equity	<u>15.65%</u>

Note: Staff relied upon the The Capital Asset Pricing Model in estimating the recommended equity rate.

¹ From the Wall Street Journal 12/31/01 data

² Based on considering an average and weighted average relevered beta.

2002 Capitalization Rate Study Wireless Companies Capital Asset Pricing Model - Ex Post

Component	Industry Computation	
Common Stock Return (1926-2001) ¹	12.70%	
Less: Income Return, L/T Government Bonds (1926-2001) $^{\rm 1}$	5.20%	
Ex-Post Risk Premium	7.50%	
Beta ²	1.20	
Adjusted Risk Premium	9.00%	
Risk Free Return 25 - 30 Year Treasury Bonds ³	5.69%	
·		
Projected Return on Common Equity	14.69%	

Note: Staff relied upon the The Capital Asset Pricing Model in estimating the recommended equity rate.

¹ Ibbotson Associates, Inc. Study

² Based on considering an average and weighted average relevered beta.

³ Wall Street Journal 12/31/01 data

2002 Capitalization Rate Study Wireless Companies Equity Rates

a	b	c	d	e	f	g	h	i	j	k	1
		Stock				2002	2002	2002	E/P	Div Yld+	DvYld+
Valul Line		Price	2001	2001	2002	Dividend	Est. Div	Avg. Erns	Ratio	DvGwth	ErnsGwth
Rating	Company Name	01/01/02	Earnings	Dividends	Est Div	Yield	Growth	Growth	(d/c)	(g+h)	(g+i)
A	Alltel Corp.	61.7300	2.65	3.10	1.37	2.22%	NMF	11.64%	4.29%	2.22%	13.86%
B++	AT&T Wireless Group	14.3700	0.05	0.07	NMF			27.27%	0.35%		27.27%
B++	CenturyTel Inc	32.8000	1.55	0.20	0.20	0.61%	9.00%	10.82%	4.73%	9.61%	11.43%
В	Sprint PCS Group	24.4100	1.25	0.00	NMF		NMF	31.78%	5.12%		31.78%
В	Telephone & Data Systems ¹	89.7500	2.75	0.54	0.58	0.65%	6.00%	25.55%	3.06%	6.65%	26.20%
В	US Cellular	45.2500	2.10	0.00	NMF		NMF	16.40%	4.64%		16.40%
C++	Western Wireless	28.2500	1.50	0.00	NMF		NMF	31.41%	5.31%		31.41%
C+	Nextel Communications	10.9600	2.00	0.00	NMF		NMF	28.57%	18.25%		28.57%
NMF	Dobson Communications	8.5400	2.33	0.00	0.00		NMF	11.00%	27.28%		11.00%
		Mean				,	7.50%	21.60%	8.11%	6.16%	21.99%
	Median										
	7.50%	25.55%	4.73%	6.65%	26.20%						
					25.26%						

Note: The range of rates based on dividend yield plus earnings growth indicates rates from 11.00% to 31.78%.

The DCF model was not weighted or relied upon because a majority of the companies available for inclusion in the study were not paying dividends.

In addition, the reported earnings growth rates may not be sustainable.

Sources: Columns a, b, d, e, f and g were extracted from Value Line.

Columns c was obtained from the Yahoo Historical Quote Market Guide.

Column i is an average of Value Line, Zacks, and Thomson.

¹Parent company of US Cellular.

2002 Capitalization Rate Study Wireless Companies Long-Term Earnings Growth

a	b	С	d	e	f
Value Line					
Rating	Company Name	Value Line	Zacks	Thomson	Average
A	Alltel Corp.	11.50%	12.90%	10.53%	11.64%
B++	AT&T Wireless Group	NMF	26.67%	27.86%	27.27%
B++	CenturyTel Inc	10.00%	11.00%	11.45%	10.82%
В	Sprint PCS Group	NMF	31.75%	31.80%	31.78%
В	Telephone & Data Systems ¹	31.00%	17.68%	27.98%	25.55%
В	US Cellular	14.00%	16.80%	18.40%	16.40%
C++	Western Wireless	30.50%	30.75%	32.99%	31.41%
C+	Nextel Communications	NMF	27.80%	29.33%	28.57%
NMF	Dobson Communications	NMF	11.00%	11.00%	11.00%
	Mean	19.40%	20.71%	22.37%	21.60%
	Median	14.00%	17.68%	27.86%	25.55%
	Weighted Average				24.87%

Note: The DCF model was not weighted or relied upon because a majority of the companies available for inclusion in the study were not paying dividends.

In addition, this growth may not be sustainable over a long period of time.

2002 Capitalization Rate Study Wireless Companies Beta Analysis

a	b	c	d	e	f	g	h	i
		Value		Standard		Debt		WTG Avg
Value Line	e	Line	Zacks	& Poors	Average	Equity	Unlevered	Debt/Equity
Rating	Company Name	Beta	Beta	Beta	Beta	Ratio	Beta ¹	Ratio
A	Alltel Corp.	0.80	0.51	0.48	0.60	0.20	0.53	0.04
B++	CenturyTel Inc	1.00	0.77	0.74	0.84	0.61	0.61	0.04
В	Sprint PCS Group	1.25	2.53	n/a	1.89	0.51	1.45	0.17
В	Telephone & Data Systems	0.80	0.93	0.96	0.90	0.20	0.80	0.01
В	US Cellular	0.85	1.06	1.04	0.98	0.10	0.93	0.00
C++	Western Wireless	1.20	1.09	n/a	1.15	0.95	0.73	0.04
C+	Nextel Communications	1.95	2.40	2.25	2.20	2.16	0.96	0.54
	Mean	1.12	1.33	1.09	1.22	0.68	0.86	
	Median	1.00	1.06	0.96	0.98		0.80	
	Mean w/o Nextel Comm.				1.06			
	Weighted				1.50		0.95	0.85
	Relevered Beta using an average	30%	35%					
	based on Debt Capital structure	_		1.08	1.13	<u> </u>		
	Relevered Beta using a weight		a and					
	based on Debt Capital structure	. •		1.19	1.25			

Formulas:

Where: D/E is the debt to equity ratio

t is the tax rate (assumed to be 40%)

Note: AT&T Wireless Group and Dobson Communications were not included in this calculation because no meaningful information was available.

These companies when take as a group are assumed to approximate a "B" group ranking.

Unlevered Beta = Beta/[1+(1-t)(D/E)]

² Relevered Beta = Unlevered Beta X [1+(1-t)(D/E)]

2002 Capitalization Rate Study Wireless Companies Debt Rate

Debt Rate - 8.10% for Major Markets ¹

There was no known debt issuance close to the lien date from any pure wireless operator. However, a review of bonds issued by a major company with a presence in the major markets near the lien date revealed a bond rating of Baa ¹. Based on this, staff feels that a reasonable debt rate of similar companies should be 8.10%, with an increase in the rates for the midsize and smaller markets.

Other Debt Rates Considered

Moody's Utility Bond Yield Average - 12/31/01 ²	7.76%
Moody's Utility Bond Yield (Baa) - 12/31/01 ²	8.14%

¹ Bondsonline.com as of 2/22/02.

² Obtained from Moodys.com internet source as of 12/31/01.

2002 Capitalization Rate Study Wireless Companies Capital Structure

a	b	С	d	e	f	g	h	i	j	k
		Co	ommon Equi	ty	Preferred	Long-Term	Total	Ratios		
		Shares	Market	Total	Stock	Debt Capital		Common	Preferred	Long-Term
Value Line		(Millions)	Value(\$)	(\$Millions)	(\$Millions)	(\$Millions)	(\$Millions)	Equity	Stock	Debt
Rating	Company Name		Per Share	(c*d)			(e+f+g)	(e/h)	(f/h)	(g/h)
A	Alltel Corp.	310.41	61.73	19,161.61	0.40	3,752.20	\$22,914.21	83.62%	0.00%	16.37%
B++	AT&T Wireless Group	2,530.36	14.37	36,361.29	-	6,488.00	42,849.29	84.86%	0.00%	15.14%
B++	CenturyTel Inc	141.10	32.80	4,628.17	8.00	2,802.00	7,438.17	62.22%	0.11%	37.67%
В	Sprint PCS Group	985.69	24.41	24,060.80	526.00	11,810.00	36,396.80	66.11%	1.45%	32.45%
В	Telephone & Data Systems ¹	58.56	89.75	5,255.88	9.00	1,064.30	6,329.18	83.04%	0.14%	16.82%
В	US Cellular	86.09	45.25	3,895.70	-	406.80	4,302.50	90.55%	0.00%	9.45%
						Totals	\$120,230.15			
							Mean	78.40%	0.28%	21.32%
							Median	83.33%	0.05%	16.60%
							Weighted Average	77.65%	0.45%	21.89%
C++	Western Wireless	78.79	28.25	2,225.73	_	2,120.40	4,346.13	51.21%	0.00%	48.79%
C+	Nextel Communications	798.31	10.96	8,749.45	2,336.00	16,522.00	27,607.45	31.69%	8.46%	59.85%
NMF	Dobson Communications	93.78	8.54	800.84	772.90	1,621.60	3,195.34	25.06%	24.19%	50.75%
TVIVII	Dooson Communications	75.70	0.54	000.04	112.50	Totals			24.1770	30.7370
						101413	\$33,140.72			
							Mean		10.88%	53.13%
							Median		8.46%	50.75%
							Weighted Average		8.84%	57.65%

Note: The capital structure selected was chosen based on the data above that a propsective purchaser would most likely employ in the various California markets.

Sources: Columns a,c,f,g and h were extracted from Value Line dated January 4, 2002.

Column d (stock price) was extracted from the Yahoo Finance Historic Quotes as of Dec. 31, 2001.

¹Parent company of US Cellular.

2002 Capitalization Rate Study Wireless Companies Comparison of Wireless Companies for Lien Dates 2001and 2002

	2001						2002						Differences					
	Common Equity	Cap Str	Debt	Cap Str	Basic Cap	Common Equity	Cap Str	Debt	Cap Str	Basic Cap	Common Equity	Cap Str	Debt	Cap Str	Basic Cap			
Rating	Rate	%	Rate	%	Rate	Rate	%	Rate	%	Rate	Rate	%	Rate	%	Rate			
NR-1	14.40%	80%	8.14%	20%	13.15%	14.50%	80%	8.24%	20%	13.25%	0.10%	0%	0.10%	0%	0.10%			
NR-2 ¹	N/S		N/S		N/S	15.25%	75%	8.39%	25%	13.59%								
$NR-3^2$	17.02%	75%	8.65%	25%	14.92%	15.71%	70%	8.65%	30%	13.59%	-1.31%	-5%	0.00%	5%	-1.33%			
NR-4 ³	21.47%	70%	9.16%	30%	17.77%	19.00%	65%	8.90%	35%	15.47%	-2.47%	-5%	-0.26%	5%	-2.30%			
NR-5 ⁴	25.65%	65%	10.17%	35%	20.24%	22.00%	65%	9.92%	35%	17.77%	-3.65%	0%	-0.25%	0%	-2.47%			

N/S: Not Separated

¹ A new category created this year to distinguish companies representing predominantly the large to midsize PCS markets in California. In previous years, companies in this category were categorized as NR-1.

² Termed NR-2 in the prior year

³ Termed NR-3 in the prior year

⁴ Termed NR-4 in the prior year